Claims:

1-5 (canceled)

6(new), One dual-channel redundant wireless link (RFWL) device comprising:

two separate wireless networking radios that can communicate with remote correspondent wireless networking radios forming a wireless networking sub-link via antenna means;

processor means running system features for SE;

one wired LAN interface for connecting to computer LAN;

one interface/bus means

wherein processor means running redundant communication features means for communicating with remote said RFWL device; and

whereby said two separate wireless networking radios are attaching to processor means via said interface/bus means; and

wherein said two separate wireless networking radios can communicate to the correspondent wireless networking radios remote said RFWL device.

7(new), One dual-channel redundant wireless link Service Equipment (SE) comprising:

one said RFWL device of claim 6; and

wherein said processor means of said RFWL device running redundant communication service features means for communicating with the CE of claim 8.

8(new), One dual-channel redundant wireless link Client Equipment (CE) comprising:

one said RFWL device of claim 6; and

wherein said processor means of said RFWL device running redundant communication client features means for communicating with said SE of claim 7.

9(new), The dual-channel redundant wireless link Service Equipment (SE) of claim 7 wherein said redundant communication service features means has feature means of having one of said wireless networking radio channels communicating with the said correspondent wireless networking radio channel of the said CE of claim 8, and the other of the said wireless networking radio channels of claim 7 working at standby mode for communicating with the correspondent wireless networking radio channel of the said CE of claim 8.

10(new), The dual-channel redundant wireless link Service Equipment (SE) of claim 7 wherein said redundant communication service features means has feature means of communicating to said a plurality CE of claim 8 with one of said wireless networking radio channels communicating with the said correspondent wireless networking radio channels of a plurality of said CE of claim 8; and the other one of the said wireless networking radio channels communicating with the said correspondent wireless networking radio channels of other a plurality of said CE of claim 8, and said wireless networking radio channels that is not communicating with the same said CE having standby communicating feature means for take over the communication with the same said CE when the first communication link stops.

11(new), The dual-channel redundant wireless link Client Equipment (CE) of claim 8 wherein said redundant communication service features means has feature means of having one of said wireless networking radio channels

communicating with the said correspondent wireless networking radio channel of the said SE of claim 7; and the other of the said wireless networking radio channels of said CE working at standby mode for communicating with the correspondent wireless networking radio channel of the said SE.

12(new), The dual-channel redundant wireless link Client Equipment (CE) of claim 8 wherein said redundant communication service features means has feature means of having one of the better said wireless networking radio channels communicating with the said correspondent wireless networking radio channel of the said SE of claim 7, and the other of the said wireless networking radio channels of said CE working at standby mode for communicating with the correspondent wireless networking radio channel of the said SE.

13(new), The dual-channel redundant wireless link Client Equipment (CE) of claim 8 wherein said redundant communication client features means has the feature means comprising:
selecting primary radio channel to communicate with up link SE; and
working at redundant mode; and
working at non-redundant mode; and
recovering from non-redundant mode to redundant mode; and
monitoring link quality.

14.(new) One point-to-point dual-channel redundant wireless link connecting two computer networks comprising:
one said Service Equipment (SE) of claim 7;
one said Client Equipment (CE) of claim 8;
one main computer network;

one client computer network

Wherein the two separate wireless networking radios of said Service Equipment (SE) communicating with remote correspondent wireless networking radios of said Client Equipment (CE) forming two wireless networking sub-links via antenna means; and

whereby said SE is communicating with said CE with one of the two wireless separate wireless networking sub-links; and

whereby said SE is connecting with one said main computer network with it wired network interface; and

whereby said CE is connecting with the other said client computer network with it wired network interface; and

wherein said two wireless separate wireless communication sub-links between said SE and CE forming a redundant wireless communication link between the SE and CE; and

Wherein one of the said two wireless communication sub-link continue communicating between the communicating SE and CE, when the other sub-link is off communication; and

whereby said main computer network communicating with said client computer network via the dual channel redundant wireless link formed by the correspondent communicating SE and CE.

15.(new) One point-to-multi-point dual-channel redundant wireless network comprising:

one Service Equipment (SE);

a plurality of Client Equipments (CE);

one main computer networks;

a plurality of client computer networks;

Wherein the two separate wireless networking radios of said Service Equipment (SE) communicating with remote correspondent wireless networking radios of

said Client Equipment (CE) forming two wireless networking sub-links via antenna means; and

whereby said CE is communicating with said SE with one of two wireless separate wireless communication sub-link; and

Wherein the two separate wireless networking radios of said Service Equipment (SE) communicating with remote correspondent wireless networking radios of said a plurality of Client Equipments (CEs) forming two point-to-multi-point wireless networking sub-links via antenna means; and

whereby said SE is communicating with one group of said a plurality of CEs with one of said two point-to-multi-point wireless networking sub-links and the other group of said a plurality of CEs with the other one of the said two point-to-multi-point wireless networking sub-links; and

whereby said SE is connecting with one said main computer network with it wired network interface, and

whereby said CE is connecting with the other said client computer network with it wired network interface, and

wherein said two wireless separate wireless communication links between said SE and CE forming a redundant wireless communication link between the SE and CE, and

Wherein one of the said two wireless communication sub-link continue communicating between the communicating SE and CE, when the other sub-link is off communication, and

whereby said main computer network communicating with said a plurality of client computer networks via the dual channel redundant wireless link formed by the correspondent communicating SE and CEs.

16(new), Method of point-to-point dual-channel redundant wireless link comprising:

connecting said wired interface of said SE of claim 14 to said main network of claim 14; and

setting said SE ready to communicating with remote said CE of claim 14; and running dual-channel communication features at said SE; and

connecting said CE of claim 14 to the said client network of claim 6; and running dual-channel communication features at said CE; and

communicating said CE to said SE redundantly.

17(new), Method of point-to-multi-point dual-channel redundant wireless link comprising:

connecting said wired interface of said SE of claim 15 to said main network of claim 15; and

setting said SE to communicating with a plurality of remote CE of claim 15; and

running dual-channel communication features at said SE; and

connecting a plurality of CE of claim 15 to their correspondent said client network of claim 15; and

running dual-channel communication features at said a plurality of CEs; and

communicating said a plurality of CE to said SE redundantly.

Abstract:

Page 13, line 21, change “radio frequency character” to – radio frequency characteristics -